Knowledge of Cervical Cancer Screening and Associated Socio-Demographic Factors among Women of Reproductive Age in Ahoada East Local Government Area of Rivers State, Nigeria

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ABSTRACT

This study investigated knowledge of cervical cancer screening and associated socio-demographic factors among women of reproductive age in Ahoada East Local Government Area of Rivers State. The descriptive survey research design was adopted with a population consisting of 43,068 women of childbearing age (15-49years) in Ahoada East Local Government Area. The sample size for the study was 435. The multi-stage sampling procedure was adopted. The instrument for data collection was a structured questionnaire with a reliability coefficient of 0.78. Data analysis was carried out with the aid of the Statistical Package for Social Scientists (SPSS V-27) using statistical tools such as percentage and Chi-square set at 0.05 alpha level. The finding of the study showed that the level of knowledge of cervical cancer screening was average (38.7%). The result shows that there was a statistically significant association between socio-demographic factors [age (X^2-value = 42.05, df = 4, $p<0.05$), education (X^2-value = 67.26, df = 6, $p<0.05$) and marital status (X^2-value = 18.43, df = 6, $p<0.05$)] and knowledge of cervical cancer screening. It was concluded that women of reproductive age in Ahoada East had good knowledge of cervical cancer screening. It was recommended among others that, there is the need for public health practitioners to establish a sustainable awareness campaign about cervical cancer screening through the media and other channels of communication.

Keywords: Ahoada, Factors, Knowledge, Socio-demographic

INTRODUCTION

Knowledge of cervical cancer screening is an essential determinant for its acceptance and practice among women. Globally, cervical cancer is the third most frequent cancer among women and the most common malignancy of the female genital tract in the developing countries (International Cancer Organization, 2016). In sub-Saharan Africa, 34.8 new cases of cervical cancer are diagnosed per 100,000 women annually and 22.5 per 100,000 women die from the disease. According to the Cervical Cancer Global Crisis Card, Nigeria ranks 5th among countries with regards to death count from cervical cancer (National Cervical Cancer Free Coalition, 2011, who, 2017). The high burden of cervical cancer in developing countries, like Nigeria, is due both to a high prevalence of HPV infection and the lack of effective cervical cancer screening programmes (Ndikom & Ofi, 2012). In cases where effective screening programmes are available, negative health-seeking behavior of the populace and poor knowledge have led to poor utilization of such services. Moreso, several reasons have been implicated for the poor cervical cancer screening practice among women. Okwe et al. (2019) stated that, the reasons women did not undergo cervical cancer screening were belief that it might be painful, followed by embarrassment, not being referred by a health professional, and fear of having positive results and deficiency in knowledge about cervical cancer screening.

The associated between knowledge of cervical cancer screening and its practice cannot be over-emphasized. Several health behaviour has been marred by misconception, moreover, one cannot practice what he does not

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know. Oche et al. (2013) posited that, the lack of knowledge and understanding about the process and risk of screening, and the potential threat to feminity as a consequence of further interventions if screened positive, compound the complexities of women's decision-making about cervical cancer screening. According to Okunowo et al. (2020), the reason women do not practice cervical cancer screening include ignorance, misconceptions, religious beliefs and age. Also, Dulla et al. (2017) found that one of the factors significantly associated with cervical cancer screening practice was knowledge about cervical cancer outcome.

Ahoada East is a semi-urban area with several healthcare facilities but services focusing on cervical cancer screening is scarce. Considering that most cancers including cervical cancer do not exhibit serious symptoms to give signal that it is developing, this makes many women affected with cervical cancer not to know their status until the disease grow to its late stage and become so threating to life before they decide to visit a doctor. At this stage, it becomes difficult for them to manage it, cum the high cost of treatment involved which many could not afford thereby leading to death. This is so saddening and calls for urgent public health attention. Thus, the need to carry out this educational diagnoses of women's knowledge of cervical cancer screening so as to be able to ascertain what efforts needs to be made to promote cervical cancer screening. Therefore, this study assessed the knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State. The study sought to provide answers to the following research questions:

1. What is the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State?
2. What is the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area based on age?
3. What is the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area based on educational status?
4. What is the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area based on marital status?

Hypotheses

The following null hypotheses postulated were tested at 0.05 alpha level:

1. There is no significant association between age and knowledge of cervical cancer screening among women in Ahoada East Local Government Area of Rivers State.
2. There is no significant association between educational status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State.
3. There is no significant association between marital status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State.

METHODOLOGY

A descriptive research design was adopted to carry out this study in Ahoada East. Ahoada East Local Government Area. Ahoada East is a Local Government Area of Rivers State, Nigeria, located northwest of Port Harcourt. Its headquarters is in the city of Ahoada. It covers an area 341 square kilometres (Km^2). It is bounded by Akabuka community in the North, Abua in the South, Mbiama in the East and Elele in the West. Its vegetation is mainly a high dense rain forest. The economic activities of the people are mainly farming, fishing and hunting. The common language of the people is the Ekpeye dialect. There are numerous health centres distributed across communities that made up the Local Government Area to render healthcare services to the residents. The study population comprised of the forty-three thousand and sixty-eight (43,068) women of childbearing age (15-49years) in Ahoada East LGA. The sample size for the study was 435 which was determined using the Taro Yamane formula: $n = N/1+N(e)^2$, and adding a non-compliance rate of 10%. Where, n = sample size, N = population, e = error or precision level set at 0.05 and 1 is a constant. The

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purposive sampling technique was used to select the respondents because only women of reproductive age meet the inclusive criteria for the study.

The instrument for data collection was a structured questionnaire titled: "knowledge, of cervical cancer screening questionnaire". The instrument consisted of two sections A, and B. Section A elicited responses on demographic data of respondents, and Section B measured the knowledge of respondents with response options of Yes or No. The reliability coefficient of 0.78t was ascertained using Kuder-Richardson. The administration of the instrument was done by face-to-face delivery of the questionnaire to the respondents. The researcher on approaching the respondents, clearly explained the aim of the study and methods to be adopted to the respondents. Those who are willing were given the questionnaire for data collection which were retrieved immediately after completion. The completed copies of the questionnaire were retrieved, coded and analyzed using Statistical Package for Social Scientists (SPSS V-27). The descriptive statistics of percentage, and frequency were used to answer research questions, while inferential statistics of Chi-square set at 0.05 alpha level was used to test the hypotheses.

RESULTS

Table 1: Percentage distribution showing the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East LGA

Level of knowledge	Frequency	Percentage
Good	133	32.2
Average	160	38.7
Poor	120	29.1
Total	**413**	**100.0**

Table 1 presents the percentage distribution of the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East. The result showed that, more 160(38.7%) of the respondents had average knowledge, 133(32.2%) had good knowledge while 120(29.1%) had poor knowledge. Thus, the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State was average

Table 2: Chi-square test showing association between age and knowledge of cervical cancer screening among women of reproductive age in Ahoada East LGA

	Knowledge of Cervical Cancer							
Age	**Good F(%)**	**Average F(%)**	**Poor F(%)**	**Total F(%)**	**df**	**X^2-value**	**p-value**	**Decision**
20-29 years	59(28.6)	78(37.9)	69(33.5)	206(100)	**4**	**42.05**	**0.00***	**Rejected**
30-39 years	50(42.7)	58(49.6)	9(7.7)	117(100)				
40-49 years	24(26.7)	24(26.7)	42(46.7)	90(100)				
Total	**133(32.2)**	**160(38.7)**	**120(29.1)**	**413(100)**				

*Significant

Table 2 shows the chi-square test of significant association between age and knowledge of cervical cancer screening among women of reproductive age in Ahoada East. The result shows that there was a statistically significant association between age (X^2-value = 42.05, df = 4, $p<0.05$), and knowledge of cervical cancer screening. Therefore, the null hypotheses which stated there was no significant association between age and knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State was rejected.

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Table 3: Chi-square test showing association between education status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East LGA

	Knowledge of Cervical Cancer							
Educational status	**Good F(%)**	**Average F(%)**	**Poor F(%)**	**Total F(%)**	**df**	**X^2-value**	**p-value**	**Decision**
None	33(40.7)	48(59.3)	0(0.00)	81(100)	6	67.26	0.00*	Rejected
Primary	0(0.00)	9(100)	0(0.00)	9(100)				
Secondary	60(28.7)	78(37.3)	71(34.0)	209(100)				
Tertiary	40(35.1)	25(21.9)	49(43.0)	114(100)				
Total	**133(32.2)**	**160(38.7)**	**120(29.1)**	**413(100)**				

*Significant

Table 3 shows the chi-square test of significant association between educational status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East. The result shows that there was a statistically significant association between education (X^2-value = 67.26, df = 6, $p<0.05$) and knowledge of cervical cancer screening. Therefore, the null hypotheses which stated there was no significant association between education and knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State was rejected.

Table 4: Chi-square test showing the association between marital status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East LGA of Rivers State

	Knowledge of Cervical Cancer							
Marital status	**Good F(%)**	**Average F(%)**	**Poor F(%)**	**Total F(%)**	**df**	**X^2-value**	**p-value**	**Decision**
Single	(58(28.3)	86(42.0)	61(29.8)	205(100)	6	18.43	0.00*	Rejected
Married	59(33.7)	57(32.6)	59(33.7)	175(100)				
Cohabiting	8(47.1)	9(52.9)	0(0.00)	17(100)				
Separated	8(50.0)	8(50.0)	0(0.00)	16(100)				
Total	**133(32.2)**	**160(38.7)**	**120(29.1)**	**413(100)**				

*Significant

Table 4 shows the chi-square test of significant association between socio-demographic factors (age, education and marital status) and knowledge of cervical cancer screening among women of reproductive age in Ahoada East. The result shows that there was a statistically significant association between marital status (X^2-value = 18.43, df = 6, $p<0.05$)] and knowledge of cervical cancer screening. Therefore, the null hypotheses which stated there was no significant association between marital status and knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State was rejected.

DISCUSSION OF FINDINGS

The findingS of the study showed that the level of knowledge of cervical cancer screening among women of reproductive age in Ahoada East Local Government Area of Rivers State was average. This finding is

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encouraging because knowledge has been identified as a prerequisite for any health practice. The finding of this study is similar to that of Dulla et al. (2017) which showed that majority of the respondents had knowledge about cervical cancer. The similarity found between the two studies can be explained by the fact that the previous study was carried out among female health care workers who are expected or seen as custodian of knowledge of vast health issues. Whereas, the present study was carried out among women of childbearing age which implies that, the health care workers who are knowledgeable about cervical cancer screening may have been committed to making such information available to women during their clinical visits hence, the similarity between the two studies. However, the findings of this study is at variance with several other studies. The finding of this study is at variance with that of Al-meer et al. (2011) which showed that the respondents who are women visiting primary health care in Qatar had poor knowledge of cervical cancer screening. The finding of this study is also different from that of Ahmed et al. (2013) which showed that only few of the respondents were knowledgeable about cervical cancer screening. The variation found between the two studies might be due to the fact that the sample size for the previous study was much lesser than the one for the present study. The finding of this study is also at variance with that of Bansal et al. (2015) which showed that only 11% women had adequate knowledge about cervical cancer screening and that the lack of knowledge was mainly due to lack of population-based screening programs, inefficient mass media campaigns, and cultural barriers wherein women feel shy to discuss the diseases affecting the sexual organs. The finding of this study is also not in support of that of Aweke et al. (2017) were a lesser proportion of the respondent reported having good knowledge of cervical cancer screening. The variation found between the two studies might be due to the fact that the sample size for the previous study was much lesser than the one for the present study.

The result shows that there was a statistically significant association between education (X^2-value = 67.26, df = 6, $p<0.05$) and marital status (X^2-value = 18.43, df = 6, $p<0.05$)] and knowledge of cervical cancer screening. This finding is unexpected and thus surprising because factors particularly education which exposes one to vast information and a source of enlightenment was expect to influence vast health issues which was not the outcome in this study. The results show a significant association between education and knowledge, which aligns with expectations. The finding of this study is in tandem with that of Aweke et al. (2017) which showed that good knowledge and socio demographic factors were statistically significant with poor knowledge score for cervical cancer screening. The similarity found between the present study and the previous one might be due to the homogeneity of the characteristics of the population studied. The finding of this study is in line with that Al-meer et al. (2011) which showed that socio-demographic factors such as age and education had a significant relationship with knowledge of cervical cancer screening. The finding of this study is also in tandem with that Bansal et al. (2015) which showed that socio-demographic factors such as age and education were significant predictors of knowledge of cervical cancer screening. The variation found between the two studies might be due to the variation in the sample size, and location of the different studies.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, it was concluded that women of reproductive age in Ahoada East Local Government Area of Rivers State had average level of knowledge of cervical cancer screening. Based on the findings of the study, the following recommendations were made: There is the need for public health practitioners to establish a sustainable awareness campaign about cervical cancer screening through the media and other channels of communication. The primary health care board should adopt cervical cancer screening package by integrating it with other reproductive health services like antenatal and postnatal care services.

Ethical Consideration: Participants were given option to either participate or decline as no one was forced to participate. Participants were assured of confidentiality, privacy and anonymity as they were asked not to write their names or reveal their identity.

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